



#### **BREASTFEEDING and LAM TRAINING COURSE**

The Physician and Nurse Trainers Workshop Manual:

This manual is adopted by the staff of the National Training and Technical Support Center for Breastfeeding in Egypt to be used to instruct physician trainers in lactation management and breastfeeding support skills. In addition to that, the LINKAGES LAM generic module has been used to strengthen the physician and nurse trainer's knowledge and skills in relation to LAM. The Training of Trainers (TOT) Workshop lasts for two weeks. The main objectives of the workshop are to:

- 1. Prepare an effective cadre of physician trainers who are well equipped with knowledge and skills to provide quality lactation management services.
- 2. Prepare an effective cadre of physician trainers who are well-equipped with knowledge and skills to provide proper counseling on LAM.
- 3. Prepare an effective cadre of physician trainers who are well equipped with knowledge and skills to provide a strong grounding in the scientific concepts of lactation management LAM.



# Lactation Management and Breastfeeding Support for Physician and Nurses Trainers SYLLABUS

#### **Course Description:**

The two-week course is designed to train physician and nurse trainers in the provision of effective breastfeeding services. This competency-based training course emphasizes both technical working knowledge of breastfeeding technology as well as teaching skills necessary for training health care providers. The course focuses on teaching practical skills relevant to breastfeeding and LAM, (e.g., breastfeeding case management, counseling and clinical support procedures, and LAM). This course utilizes a hands-on training approach to help participants learn skills related to breastfeeding.

#### **Course Duration:**

2 weeks (6 days/week X 7.5 hours/day)

#### **Language of Instruction:**

English/Arabic

### **Number of Participants:**

10 participants

#### **Course Objectives:**

By the end of the workshop, the participants will be able to:

- 1. Provide an overview of breastfeeding issues in Jordan.
- 2. Explain the "International Code of Breast Milk Substitutes".
- 3. Explain the BFHI
- 4. Maintain breastfeeding standards in Jordanian hospitals by following the ten steps for successful breastfeeding.
- 5. Explore the policy of MOH in relation to breastfeeding
- 6. Describe the biology of lactation.
- 7. Discuss the dynamic nature of human milk.
- 8. Demonstrate proper counseling skills for lactating mothers.
- 9. Demonstrate skills in counseling mothers about appropriate breastfeeding practices.
- 10.Demonstrate skills in counseling pregnant women about breastfeeding in an antenatal clinic.
- 11. Assess a breastfeed
- 12. Manage a selected number of breast and nipple problems that may impact breastfeeding.
- 13.Demonstrate skills in managing selected breast problems (e.g., obstructed lactiferous duct, mastitis, and breast abscess).
- 14. Advise mothers about methods of expressing, storing, and feeding expressed breast milk to their babies.
- 15.Explain the different techniques for handling mothers with special medical and obstetrical conditions.
- 16. Discuss methods used to help a mother increase her milk supply.
- 17. Manage cases of mothers who would like to "relactate" and cases of "reluctant nursers."
- 18. Encourage breastfeeding for infants with special conditions.
- 19. Promote breastfeeding for a low birth weight infant.
- 20. Counsels mothers about appropriate nutrition during lactation.
- 21. Assess an infant's growth pattern by using a growth chart.
- 22. Explain LAM
- 23. Demonstrate competency in managing LAM through case studies and during clinical practicum
- 24. Manage mothers using LAM



- 25. Counsel mothers and clients in relation to LAM
- 26. Explain the principles of adult learning
- 27. Explain important issues related to the training of adult learners
- 28. Discuss different the types of teaching methods

#### **Clinical Objectives**

- 1. Practice effective breastfeeding and LAM counseling
- 2. Take a breastfeeding history
- 3. Assess a breastfeed
- 4. Help the mother as needed
- 5. Teach a mother techniques of positioning during breastfeeding
- 6. Teach a mother techniques for hand expression of breast milk ( when applicable)

#### **Training Objectives**

- 1. Discuss the principles of adult learning and their applications in training events
- 2. Discuss the different training techniques appropriate for adult learning
- 3. Demonstrate competency in managing clients needs and problems in relation to breastfeeding and LAM
- 4. Demonstrate competency in presenting different case studies related to breastfeeding and LAM
- 5. Demonstrate competency in conducting a micro teaching session related to breastfeeding or LAM



#### **Evaluation plan:**

A pre- post-test will be used to assess participants' progress. Each participant has to demonstrate competency in counseling and managing at least 10 breastfeeding and LAM cases. The following scale will be used in evaluating participants' performance:

post-test on BF	25%	
post-test on LAM	25%	
Case studies	25%	
Topic presentation	25%	
TOTAL	100%	

Each trainer will prepare 10 case studies through the second week of the practical sessions (at least two cases /day). Each trainer will prepare and present one case study daily. Selection of a variety of cases is strongly recommended.

At the clinical site, all practical sessions will be observed and evaluated by peer. A total of at least 10 evaluation chick lists should be completed.

Each trainer will prepare and conduct a micro teaching session on one of the topics related to the BF and LAM manuals prepared for the training of health care providers.



**Course Title:** Breastfeeding and LAM Training Course **Session Title:** Breastfeeding in Jordan: An Overview

Session Objective: Provide an overview of breastfeeding issues in Jordan.

Enabling Objectives	Content	Time	Training Methods	Audio-Visuals	Evidence of Mastery
Discuss the status of breastfeeding in Jordan	<ul> <li>Breastfeeding studies in Jordan:</li> <li>Findings of JPFHS</li> <li>Findings of the qualitative study</li> <li>Cultural beliefs and values supportive of breastfeeding</li> <li>Support from the Holy Koran</li> <li>Traditional beliefs about breastfeeding</li> </ul>	30 min	Discussion Presentation	Cards Transparencies	By the end of the session, the participants will be able to:  • Appreciate the supportive nature of the Jordanian breastfeeding culture.



**Course Title:** Breastfeeding and LAM Training Course

Session Title: International code of Breast Milk Substitutes and National Policy

Session Objective: Explain the International code of breastfeeding Substitutes and national

policy

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Identify importance of having a marketing code for breast milk substitutes	Introduction: Reasons for decline in breastfeeding: - Social factors - Practices in health facilities - Advertising and promotion - Why a marketing code?	120 min	Discussion Presentation	Transparencies Cards	By the end of the session, the participants will be able to:  • Explain the need for establishing a code to protect breastfeeding
2. Discuss the International Bode of Breast milk Substitutes	Description of the code:  - Definition. Aim and Scope  - Historical background  - Summary of the international code provisions	10 min	Discussion Presentation	Transparencies Cards	List the Aim , Scope and Summary of the international code



Course Title: Breastfeeding and LAM Training Course

Session Title: International Code of Breast Milk Substitutes and National Policy

Session Objective: Explain the International code of breastfeeding Substitutes and national

policy

E	nabling Objectives	Content	Time	Training Methods	Audio visuals	Evidence of Mastery
1.	Identify the importance and background of the ten steps of successful breastfeeding	Introduction: The reasons for using the ten steps: - Transform hospitals into Baby and mother friendly places - End of the practice of distribution of baby formula	10 min	Discussion Group work Presentation	Transparencies Cards	By the end of the session, the participants will be able to:  • List the items of the ten steps to successful breastfeeding
2.	Discuss the items of the ten steps to successful breastfeeding	Ten steps to successful breastfeeding  Ten steps to successful breastfeeding	10 min	Discussion Group work Presentation	Transparencies	Explain each item of the ten steps.
3.	Describe the national policy for breastfeeding and BFHI in Jordan	National policy for breastfeeding – BFHI in Jordan	10 min.	Discussion Presentation	Transparencies	Explain the national policy for breastfeeding  .

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Biology of Lactation

Session Objective: Describe the biology of lactation

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Review the anatomy of the breast.	<ul> <li>Major anatomical structures of the breast</li> <li>Supporting structure and fat tissues</li> <li>Mammary secreting tissues and ductual structures</li> <li>Nipple and areola</li> <li>Neuro circulatory and lymphatic element</li> <li>Microscopic anatomy of the breast</li> </ul>	60 min	Presentation Discussion	Transparencies Handouts Slides	By the end of the session, the participants will be able to:  • Identify different anatomical structures of the breast.
2. Explain the physiology of lactation.	Hormonal influence of lactation:  Prolactin Oxytocin Human Placental lactogen Glucocorticoids Thyroids stimulating hormone Prolactin inhibiting factor  Maintenance of established lactation.		Presentation Discussion	Flipchart Slides Transparencies	Discuss the physiology of successful lactation.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Dynamic Nature of Human Milk

Session Objective: Discuss the dynamic nature of human milk.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
	G 1			GU 1	
1. Discuss the	Colostrum Transitional milk	60	Presentation	Slides	By the end of the session,
biochemical	Mature milk constituents	min	Discussion	Transparencies	the participants will be
composition of breast milk.					able to:
bleast lillik.	• Water				Describe the
	<ul><li>Lipids</li><li>Proteins</li></ul>				biochemistry of breast
					milk.
	Carbohydrates     Vitamina				IIIIK.
	• Vitamins				
	• Minerals				
0.5.1.1	• Enzymes		<b>D</b>	G1: 1	
2. Explain the	Immunology of human milk:		Presentation	Slides	Describe the
immunologic	• Cells		Discussion		immunological
aspects of human milk	Immunoglobulins				properties of human milk.
numan miik	Non-antibody				milk.
	antibacterial protection				
	• Enzymes				
	Anti-allergic				
	Properties				
3. Review the	Benefits to babies:		Presentation	Transparencies	• Enumerate the benefits
benefits of	Complete food		Discussion	Flipchart	of breastfeeding to
breastfeeding to	Easily available				infant and mother
infant and	Easily digested				
mother.	Hygienic				
	Protects against illness				
	Emotional bond				
	Benefits to mother:				
	Decreases postpartum				
	blood loss				
	Early uterine involution				
	Helps in child spacing				
	Decreases the incidences				
	of breast and ovarian				
	cancer				
	Increase economic				
	benefits to family				



**Course Title:** Breastfeeding and LAM Training Course

Session Title: Benefits of Breastfeeding

Session Objective: Identify Benefits of Breastfeeding

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
Explain the rational for promoting breastfeeding	<ul> <li>Benefits to infants</li> <li>Benefits to mothers</li> <li>Benefits to society</li> </ul>	120 min	-Discussion - Group work - Presentation	Transparencies Cards	By the end of the session, the participants will be able to:  • Identify maternal /infants benefits of breastfeeding

Course Title: Lactation Management and Breastfeeding Support for Physician Service providers

Session Title: Assessing a Breastfeed.
Session Objective: Assess a breastfeed.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
Demonstrate competency in assessing a breastfeed.	Observe mother's condition  - Age  - General health  - Nutrition  - Socioeconomic status  - Feels happy  - Looks comfortable  How a mother holds the baby  - Baby is close to mother  - Facing the breast  - Loosely held  - Turned away  - Confidently  - Nervously  Observe baby's condition  - General health  - Nutrition and - Alertness	40 min	Discussion Presentation	Transparencies	By the end of the session, the participants will be able to:  • Assess a breastfeed.



	Harri da aa 4h a h -1 10				
	How does the baby respond?				
	- Rooting for the breast				
	- Turning away				
	- Calm - Crying				
	- Refusing the breast				
	<ul><li>How does the mother put her baby on the breast?</li><li>Push her nipple into the mother put her baby on the breast?</li></ul>				
	- Lean forward				
	- Bringing her baby to her breast				
	How does the mother hold the breast?				
	- Close to the areola				
	- Scissors hold & supporting whole breast				
	Signs of food attachment Signs of poor attachment Signs of effective suckling:				
	- Slow deep sucks				
	- Loud swallowing sound				
	End of breastfeed:				
	- Baby satisfied				
	- Baby releasing breast himself/herself				
	Condition of the mother's breast:				
	- Size				
	- Shape				
	- Nipples				
	- Full before and soft after				
	feeds				
2. Explain the	Body position	20	Discussion	Handouts	Effectively use the
breast	Responses	min	Role		breastfeeding
observation	Emotional bonding		Playing		observation form.
form.	Anatomy				
	Suckling				
	Rim spent suckling				

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Counseling Skills in Breastfeeding

Session Objective: Demonstrate proper counseling skills for lactating mothers

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Define the term	Introduction Definition of counseling	15 min	Presentation Discussion	Transparencies	Define the term 'counseling.'
'counseling.'  2. Explain the purpose of counseling in breastfeeding  3. Identify the	Purpose of counseling - To influence prenatal decision making - Provide practical information - Provide on-going support Characteristics of an effective	15 min	Discussion	Transparencies  Transparencies	<ul> <li>Recognize         <ul> <li>the need to</li> <li>counsel</li> <li>breastfeeding</li> <li>mothers.</li> </ul> </li> <li>List</li> </ul>
Characteristics of an effective counseling session	counseling session: - Unhurried - Private - Uninterrupted - Ask open-ended questions - Client makes her decisions	min	exercises Discussion	Handouts	characteristic s of effective counseling.
4. Demonstrate the skills of an effective counseling session	Counseling skills Listening and learning skills:  Ask open-ended questions  Use helpful non-verbal communication  Use responses and gestures to reflect on what a mother says  Empathize-show that you are interested  Avoid being judgmental Building confidence:  Accept what a mother thinks and feels  Recognize and praise what a mother and a baby are doing correctly  Give practical tips  Give relevant information  Use simple language  Make one or two suggestions, not commands	30 min	Presentation Discussion Role-play Case studies	Transparencies Hand out	Apply the principles of effective counseling.

**Course Title:** Breastfeeding and LAM Training Course **Session Title:** Antenatal Counseling for Breastfeeding

Session Objective: Demonstrate skills in counseling pregnant women about breastfeeding in an

antenatal clinic.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Explain the different ways of preparing a pregnant woman psychologically for breastfeeding	Introduction Psychological Preparation: - Believe that she can breastfeed - Know that breast milk is all that a baby needs - Know that breast size and shape doesn't influence amount - Learn about the expected physiological changes of her breasts: - Breast enlarged in size, harder than normal and a little tender Nipples become larger and red when erect - The skin over the breasts may produce striea - After first 3 months breasts start to secrete a clear fluid - By the end of pregnancy there will be colostrum Know something about how the baby will behave and what the mother has to do.	20 min	Presentation Discussion	Flipchart	By the end of the session, the participants will be able to:  • Enumerate the reasons for preparing pregnant women psychologically for breastfeeding.

**Course Title:** Breastfeeding and LAM Training Course **Session Title:** Antenatal Counseling for Breastfeeding

Session Objective: Demonstrate skills in counseling pregnant women about breastfeeding in an

antenatal clinic.

<b>Enabling Objectives</b>	Content	Time	Training	Audiovisuals	Evidence of Mastery
			Methods		
2. Identify pregnant women who are atrisk for breastfeeding difficulties.	Identify pregnant at-risk women who may have problems breastfeeding  History taking Breast examination	10 min	Group Discussion	Transparencies Handouts	By the end of the session, the participants will be able to:  • Recognize the symptoms of at-risk pregnant women who may experience breastfeeding difficulties.
3. Demonstrate skills in preparing pregnant women psychologically for breastfeeding	Prenatal education include:  Optimal breastfeeding behaviors Briefly explain how to breastfeed Nutrition education Personal hygiene Antenatal counseling and education Psychological preparation Giving important and relevant information	60 min	Group Discussion Role playing Case studies	Transparencies Handouts	Apply the principles of counseling and prenatal education to pregnant women
4. Discuss cultural misconceptions regarding breastfeeding.	Breastfeeding misconceptions - Cultural Misconception during pregnancy - Stopping breastfeeding with pregnancy.	10 min	Group Discussion	Handout	Respond to the most common misconceptions of breastfeeding in Jordan.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Basics of Breastfeeding Practices.

Session Objective: Demonstrate skills in counseling about appropriate breastfeeding practices.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. List basic practices of breastfeeding.	Introduction:  • Basics of breastfeeding practices	10 min	Presentation	Flipchart	By the end of the session, the participants will be able to:  • Identify appropriate Breastfeeding practices.
2. Discuss basics of breastfeeding practices.	<ul> <li>Early initiation of first feed</li> <li>Avoiding prelacteal feeds</li> <li>Exclusive Breastfeeding:</li> <li>On demand feeding</li> <li>Night feeding</li> <li>Duration and frequency of feeds</li> <li>Feeding from one or both breasts</li> </ul>	10 min	Presentation Discussion	Flipchart Slides	Explain basics of breastfeeding practices.
3. Demonstrate skills in counseling mothers about good positioning and attachment.	<ul> <li>Positioning the baby to breastfeed.</li> <li>Attaching the baby to the breast.</li> </ul>	10 min	Demonstration	Slides Doll Breast model	Demonstrate competency in counseling mothers about appropriate practices of breastfeeding.
4. Describe breastfeeding positions for lactating mothers	<ul><li> Cradle position.</li><li> Football position</li><li> Side lying position</li><li> Supine position</li></ul>	90 min	Presentation Demonstration on models	Transparencies Models	Counsel mothers about the different positions for breastfeeding.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Insufficient Milk

Session Objective: Discuss methods used to help a mother increase her milk supply.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
Objectives  1. Discuss the reasons a baby may not get enough milk.	Insufficient milk supply can be classified as:  - Perceived milk insufficiency  - True milk insufficiency  Causes of poor milk production  - Conditions present in a baby such as illness and congenital abnormalities  - Conditions present in mother such as:  Illness  Fatigue  Psychological inhibition  Lack of confidence  Smoking  Breastfeeding techniques such as:  - Delayed initiation  - Infrequent feeds  - Scheduled feedings  - Use of bottles and pacifiers	20 min	Methods Presentation Discussion	Flip chart Transparencies	By the end of the session, the participants will be able to:  • Identify causes of poor milk production.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Insufficient Milk

Session Objective: Discuss methods used to help a mother increase her milk supply.

Enabling	Content	Time	Training Methods	Audiovisuals	Evidence of
Objectives  2. Determine if a baby is getting enough breast milk.	Adequate breast milk intake  - Baby ill urinate 6-or more times/day  - Weight gain 120-200 gm/week  - Baby's growth curve is within normal  - Baby will pass stool frequently at least  - 6 times in 24 hours in the first few weeks of life Signs of milk removal  -Breast is full before feeding and softer afterwards  -Sensation of let down reflex  -Audible swallowing  -Milk visible in baby's mouth Adequate breast milk intake  -Breastfeeding 8-12 times/24 hours  -Effective nursing 10-2- minutes on each side.	0 min	Presentation	Transparencies	Demonstrate competency in assessing if a baby is getting enough milk.
3. Discuss the management of an insufficient milk supply.	Guidelines for helping mother to increase her milk supply  - Increase mother's confidence  - Relaxation techniques  - Rest  - Good positioning and attachment  - Frequent breastfeeding  - Encourage mother to eat a balanced diet  - Milk expression  - Preparation of the breast before feeding  - Use of drug	20 min	Presentation Discussion	Flip chart Transparencies	Explain the management of low milk production.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Breastfeeding Problems

Session Objective: Manage cases of mothers who would like to "relactate" and cases of "reluctant

nurser".

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Discuss situations in which mothers may want to relactate.	Indications of relactation  - Delayed initiation of breastfeeding due to maternal or fetal illness  - After weaning  - Change from bottle to breastfeeding  - Part of rehydration therapy	10 min	Presentation	Flip chart Transparencies	By the end of the session, the participants will be able to:  • Identify the indications of relactation.
2. Identify the requirements of relactation.	Successful relaction needs:  - Build mothers' confidence  - Good suckling reflex of the baby  - Advise mothers to eat well	10 min			Counsel a relactating mother regarding diet, confidence, and baby's suckling reflex.
3. Explain the steps for relactation.	<ul> <li>Steps for relactation</li> <li>Rest</li> <li>Put the baby to the breast every 2 hours</li> <li>Good positioning and attachment</li> <li>Stimulate let down reflex</li> <li>Avoid artificial nipples</li> <li>Milk expression following each</li> <li>Reduce the amount of supplement gradually</li> </ul>	10 min	Presentation Case study	Flip chart Transparencies	Demonstrate competency in advising mothers about proper techniques for relactation.

Course Title: Lactation Management and Breastfeeding Support for Physician Service Providers

**Session Title:** Breast Problems

Session Objective: Manage a selected number of breast and nipple problems that impact

breastfeed.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Identify	Inverted nipple	5	Discussion	Transparencies	By the end of the session, the
common breast	Sore nipple	min	Presentation	Transparences	participants will be able to:
problems that	Breast engorgement				Function   Function
impact	Candidiasis				List the early breast
breastfeeding	Obstructed lactiferous				problems that can affect
	duct				breastfeeding.
	Mastitis				
	Breast abscess				
2. Manage the	Diagnosis:	10	Discussion	Slides	Explain the management of
problem of an	-Pressing the areola	min	Presentation	Transparencies	a case of an inverted nipple.
inverted nipple.	-Clinical picture				
	Treatment:				
	-Manual stretch				
2 Managa	-Plastic syringe Causes:	10	Discussion	Slides	D
3. Manage cases of	-Incorrect feeding	min	Presentation		Demonstrate competency in
engorged	practices	111111	Fresentation	Transparencies	managing engorged breasts.
breasts.	-Incorrect attachment				
4. Discuss the	Causes:	10	Discussion	Slides	Manage a case of sore
problem of sore	-Incorrect attachment	min	Presentation	Transparencies	nipples.
nipples	Frequent use of soap	5			трргоз.
	Fungal infection	min			
	Treatment:				
	-Breast milk				
	How to prevent sore				
	nipples:				
	-Good attachment of				
	-Early treatment of				
	candidacies and thrush.				
5. Manage	Signs of candidacies		Discussion	Slides	Discuss the management of
candidial	Signs of thrush		Presentation	Transparencies	candidial infection of the
infection of the	infection				nipple.
nipple	Treatment of				
	candidacies and thrush				

**Course Title:** Breastfeeding and LAM Training Course

**Session Title:** Breast Problems

Session Objective: Manage a selected number of breast and nipple problems that may impact

breastfeed.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
6. Discuss causes, symptoms and the management of an obstructed lactiferous duct.	Causes - Milk slasis - Continuous pressure - Incomplete drainage Symptoms - Lumps - White dot on nipple Management - Obstructed duct - Recurrent cases	10 min	Discussion Presentation	Transparencies Slides	Explain the causes, symptoms, and management of an obstructed lactiferous duct.
7. Discuss causes, symptoms and the management of mastitis	Causes - Predisposing factors - Causative organism - Portal of entry Symptoms - Systematic - Localized	10 min	Discussion Presentation	Transparencies Slides	• Explain the causes, symptoms, and management of mastitis
8. Discuss causes, symptoms and the management of Breast Abscess	Causes Treatment - Surgical drainage - Antibiotics - Rest - Continue breastfeeding	10 min	Discussion Presentation	Transparencies Slides	Explain the causes, and management of Breast Abscess

**Course Title:** Breastfeeding and LAM Training Course

**Session Title:** Breast Problems

Session Objective: Manage a selected number of breast and nipple problems that may impact

breastfeed.

<b>Enabling Objectives</b>	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
9. Demonstrate skills in managing some breast problems.	Case studies Management - Continue breastfeeding - Proper positioning - Warm packs - Bed rest - Proper treatment of nipple cracks or fissures - Antibiotics	20 min	Case studies	Slides	Manage a selected number of breastfeeding problems.
10. Discuss causes, symptoms and the management of breast abscess	Causes Management - Surgical drainage - Antibiotics - Rest - Continue breastfeeding		Discussion Presentation	Transparencies Slides	Explain the causes, and management of breast abscess

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Special Maternal Conditions

Session Objective: Explain the different techniques for handling mothers with special medical

and obstetrical conditions.

<b>Enabling Objectives</b>	Content	Time	Training	Audiovisuals	Evidence of Mastery
			Methods		
1. Identify causes that	Causes	10	Discussion	Flip chart	By the end of the session,
prevent early initiation	- Maternal causes	min	Presentation	Transparencies	the participants will be
of breastfeeding in	- Baby causes				able to:
mothers who deliver	- Operative causes				
by cesarean section.					• Explain the causes for
					delaying initiation of
					breastfeeding in
					mothers who deliver by
	~ " ' '				cesarean section.
2. Describe	Cradle position.	10	Presentation	Transparencies	Counsel mothers about
breastfeeding positions	Football position	min	Demonstratio	Models	the different positions
for mothers who	Side lying position		n on models		for breastfeeding.
deliver by cesarean	Supine position				
section.	T . 1 . 1	20	D		
3. Discuss the effects	- Factors which	30	Presentation	Transparencies	• List 3 methods to
of maternal medication	influence choice of a	min	Discussion		minimize infant intake
on babies and	drug for a				of drugs in breast milk.
lactation.	breastfeeding woman				
	- Factors which				
	minimize the effect of				
	a drug on breast milk.				



**Course Title:** Breastfeeding and LAM Training Course

Session Title: Medical Barriers to Breastfeeding

Session Objective: Discuss major medical barriers to exclusive breastfeeding.

<b>Enabling Objectives</b>	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
Describe the issues of risks versus benefits when considering contraindications to breastfeeding.	Breastfeeding women who suffer from:  - AIDS  - Herpes Simples  - Galactosemia  - Hepatitis  - Toxemia  - Epilepsy  - Psychiatric problems  - D.M  - Urinary tract infections	70 min	Discussion Presentation	Boards Handouts	By the end of the session, the participants will be able to:  • Recognize that galactosemia is the only contraindication to breastfeeding.

**Course Title:** Breastfeeding and LAM Training Course **Session Title:** Breastfeeding Expression and Milk Storage

Session Objective: Advise mothers about methods of expressing, storing and feeding expressed

breast milk to their babies.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Explain the rational for milk expression.	<ul><li>Infant-mother</li><li>separation</li><li>Insufficient milk supply</li></ul>	5 min	Discussion Presentation	Flipchart Transparencies	By the end of the session, the participants will be able to:
	- Engorgement				• List different reasons for milk expression.
2. Discuss options for working mothers to continue exclusive breastfeeding.	<ul> <li>Change infant schedule</li> <li>Nurseries at workplace</li> <li>Go home to feed infant</li> <li>Teach mothers to</li> <li>express breast milk</li> </ul>	5 min	Brainstorming	Flipchart Presentation	Advise mothers about options available to them to continue exclusive breastfeeding
3. Discuss different methods of milk expression.	<ul><li>- Hand expression</li><li>- Pump expression</li><li>- Manual</li><li>- Battery operated</li><li>- Electric</li></ul>	5 min	Presentation Demonstration on models	Models Transparencies	Explain proper techniques of milk expression.
4. Demonstrate steps used for breast milk hand expression using models.	Demonstration - Supervision of participants while performing steps of hand expression on models (Using a check-list)	15 min	Coaching	Models Handout (check-list)	Perform steps of hand expression on models properly.
5. Explain the modes of action of different kinds of pumps.	Types of pumps - Manual pumps - Battery operated pumps - Electric pumps	15 min	Demonstration on models Transparencies	Models of pumps Transparencies	Differentiate between the method of action for different kinds of pumps.
6. Identify different methods of storing expressed milk.	Storage of expressed milk - Room - Refrigerator	10 min	Presentation	Transparencies Handout	List different ways of milk storage.
7. Explain various options for feeding expressed milk to babies.	Feeding options - Dropper - Cup feeding - Cup and spoon	5 min	Presentation Demonstration on models	Transparencies Models	Recommend the use of cups for feeding expressed breast milk.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Special Infant Conditions

Session Objective: Encourage breastfeeding for infants with special conditions.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Manage full-term infants with medical problems.	Advantages of breast milk for an infant who suffers from: - Acute respiratory illness - Distress and hypoxia - Gastrointestinal diseases	15 min	Group Discussion Presentation	Transparencies Slides	By the end of the session, the participants will be able to:  • List the advantages of breast milk in feeding infants with medical problems.
2. Manage an infant with jaundice.	Characteristics of breastfeeding jaundice.  - Early  - Transient  - Rarely exceeds 17 mg/dL  Characteristics of breast milk jaundice  - Late  - Persists from 3w-3m  - Diagnosed by exclusion  Management of breastfeeding jaundice  - Frequent breastfeeding  - Express milk and offer to the baby  - Monitor fecal volume  Management of breast milk jaundice  - Interrupt breastfeeding if bilirubin level exceeds 20mg/dL  - Phototherapy  - Exchange transfusion	25 min	Group Discussion Case study	Transparencies	Discuss the management of jaundice in breastfeed infants

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Special Infant Conditions

Session Objective: Encourage breastfeeding for infants with special conditions.

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
	When to investigate a case of jaundice prior to 36 h. of age  - Clinical jaundice persisting more than 8 days in full ten baby  - Direct serum bilirubin over 1.5-2 mg/dL				By the end of the session, the participants will be able to:
3. Manage cases of multiple births	Special positions of feeding twin.  - Football position - Crossed position.	10 min	-Group discussion -Presentation	Transparencies	Identify special positions for feeding twins.
4. Demonstrate different methods for feeding infants with cleft lip and cleft palate	Methods of feeding an infant with cleft lip and cleft palpate - Breastfeeding - Use of breast shield - Expression and feeding of breast milk	10 min			Recognize     different     methods for     feeding an infant     with a cleft lip     and/or palate.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Low Birth Weight Baby

Session Objective: Promote breastfeeding for low birth weight infants.

	Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1.	Recognize the advantages of human milk for a low birth weight infant	Advantages human milk for low birth weight infants:  - Presence of physiological amino acids  - Low renal solute load  - Presence of active enzymes  - Antinfection properties  - Psychological benefits for both mother and infant	15 min	Discussion Presentation	Flipcharts	By the end of the session, the participants will be able to:  • Enumerate the advantages of breast-milk for a low birth weight infant
2.	Discuss the difference between term and pre-term milk	Characteristics of pre-term milk and its suitability to pre-term infant:  - Higher in protein content their term milk  - Volume of fat  - Higher energy  - Antimicrobial properties	nin	Discussion Presentation	Transparencies	Identify the importance of pre-term milk for feeding pre-term infant.

Course Title: Breastfeeding and LAM Training Course

Session Title: Low Birth Weight Baby

Session Objective: Promote breastfeeding for low birth weight infants.

Ena	abling Objectives	Content	Time	Training	Audio-Visuals	Evidence of
				Methods		Mastery
3.	Discuss feeding techniques of a low birth weight infant.	<ul> <li>Mode of feeding depends on gestational age:</li> <li>35 weeks or more breastfeeding</li> <li>32-35 weeks breastfeeding or fed on breast milk.</li> <li>Less than 32 weeks</li> <li>Parental nutrition advantages</li> <li>Intragastric feeds</li> <li>Combined enteral and parental</li> </ul>	10 min	Discussion Presentation	Transparencies Flipcharts	By the end of the session, the participants will be able to:  • List different techniques of feeding low birth weight infants.
4.	Discuss the importance of supplementation of mother's milk delivered to a low birth weight infant.	Supplementation to low birth weight infant: - Calcium - Phosphorus - Iron	15 min	Discussion Presentation	Transparencies Flipcharts	Recognize the importance of supplementation of mother's milk with minerals.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Low Birth Weight Baby

Session Objective: Promote breastfeeding for low birth weight infants.

En	abling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
5.	Discuss feeding techniques of a low birth weight infant.	<ul> <li>Mode of feeding depends on gestational age:</li> <li>35 weeks or more breastfeeding</li> <li>32-35 weeks breastfeeding or fed on breast milk.</li> <li>Less than 32 weeks</li> <li>Parental nutrition advantages</li> <li>Intragastric feeds</li> <li>Combined enteral and parental</li> </ul>		Discussion Presentatio n	Transparencies Flipcharts	By the end of the session, the participants will be able to:  • List different techniques of feeding low birth weight infants.
6.	Discuss the importance of supplementation of mother's milk delivered to a low birth weight infant.	Supplementation to low birth weight infant: - Calcium - Phosphorus - Iron		Discussion Presentatio n	Transparencies Flipcharts	Recognize the importance of supplementation of mother's milk with minerals.

**Course Title:** Breastfeeding and LAM Training Course

**Session Title:** Maternal Nutrition

Session Objective: Counsels mothers about appropriate nutrition during lactation.

<b>Enabling Objectives</b>	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
1. Explain the criteria for assessing maternal nutrition during lactation	Criteria for assessing of maternal nutrition condition:  - Weight gain during pregnancy  - Weight loss after delivery	20 min	Discussion Presentation	Transparencies	By the end of the session, the participants will be able to:  • Recognize average maternal weight gain during pregnancy and delivery.
2. Discuss the relationship between milk volume and maternal nutrition.	Effect of maternal nutrition on:  - Lactation - Milk volume and milk composition - Baby health	20 min	Discussion Presentation	Transparencies Slides	Determine that mothers can lactate their babies effectively whatever their nutritional status is.
3. Explain dietary and nutrition-related guidance that should be offered to all lactating women.	Impact of lactation on maternal nutritional needs: - Calories - Fluid - Ptn, CHO,Pat - Vitamins and minerals.	10 min	Discussion Presentation	Transparencies	Discuss the nutritional needs of lactating mothers.
4. Discuss "anemia" in lactation.	<ul> <li>Risk of anemia in lactation</li> <li>Iron needs for lactating women</li> <li>Women at high risk of anemia</li> <li>Bad nutritional habits aggravating anemia</li> </ul>	10 min	Discussion Presentation	Transparencies	Manage anemic mothers during lactation.

**Course Title:** Breastfeeding and LAM Training Course

Session Title: Growth Monitoring

Session Objective: Assess an infant's growth pattern by using a growth chart

	Enabling Objectives	Content	Time	Training Methods	Audio-Visuals	Evidence of Mastery
1.	Identify difference between "growth" and "development."	Definitions of "growth" and "development". Measurements of growth: - Body weight - Height - Head and - Chest circumference, etc.	5 min	Presentation	Flipcharts Transparencies	By the end of the session, the participants will be able to:  • Differentiate between "growth" and development."
2.	Evaluate normal growth patterns	How to weigh a child accurately? - How to interpret the growth line? - Use the growth chart	10 min	Presentation Discussion	Flipcharts Transparencies Handout	Identify different patterns of growth by using different growth charts.
3.	Identify a slow-weight-gaining infant.	Characteristics of a slow weight-gaining infant: - Health - Shows slow but steady growth - Good muscle tone Causes: - Familial - Genetic - The breastfeeding process	10 min	Presentation Discussion	Flipcharts Transparencies	Recognize     characteristics of a     slow weight-gaining     infant.

Course Title: Breastfeeding and LAM Training Course

Session Title: Training methodology

Session Objective: Explain selected techniques in promoting successful training adult learners

Enabling Objectives	Content	Time	Training Methods	Audiovisuals	Evidence of Mastery
Explain the principles of adult learning	- What is adult learning?  - Principles of adult learning	30 min	Presentation Discussion	Flipcharts Transparencies	By the end of the session, the participants will be able to:  • Explain the principles of adult learning
2. Explain important issues related to the training of adult learners	- The adult medical learner - Developing a medical training event suitable for adult learners - The role of medical trainer - Evaluating the result	60 min	Presentation Discussion	Flipcharts Transparencies Handout	Recognize the importance of preparing and conducting adult learning sessions
3. Discuss different the types of teaching methods	Interactive training model Selecting teaching methods	60 min	Presentation Discussion	Flipcharts Transparencies	Discuss the different types of teaching methods
4. Explain some helpful hints about conducting classroom dynamics	- The adult medical learner - Developing a medical training event suitable for adult learners - The role of medical trainer - Evaluating the result	30 min	Presentation Discussion	Flipcharts Transparencies Handout	Discuss important issues affecting successful classroom dynamics

#### **Pre/ Post-Test**

- 1. Signs of a good attachment include all of the following **EXCEPT**:
  - a. the chin of the baby touches the breast.
  - b. baby's cheek pulled in during suckling.
  - c. more areola is seen above baby's mouth.
  - d. baby's lower lip turned outwards.
- 2. The following conditions interfere with breastfeeding:
  - a. small sized breast
  - b. large sized breast
  - c. flat nipple
  - d. none of the above
- 3. The most appropriate method of treatment of a cracked nipple is:
  - a. apply local anaesthetic creams on the nipple
  - b. apply drops of mother's hind milk on the nipple
  - c. wash the nipples with soap and water
  - d. apply antibiotic cream on the nipple
- 4. Breastmilk is deficient in:
  - a. iron
  - b. vitamin C
  - c. vitamin A
  - d. none of the above
- 5. The following factors should be considered in selecting a drug for a breastfeeding woman:
  - a. age of the infant
  - b. possible interference with lactation
  - c. all of the above
  - d. none of the above
- 6. Breastmilk volume is highly affected by:
  - a. maternal general condition and nutritional status
  - b. maternal intake of a high caloric diet (to help milk formation)
  - c. regular, effective suckling at the breast

- d. high protein diet
- 7. Breastfeeding reduces the infant's risk of:
  - a. dental problems
  - b. diabetes
  - c. otitis media
  - d. all of the above
- 8. Pre term milk is rich in:
  - a. lactose
  - b. total proteins
  - c. calcium
  - d. phosphorus
- 9. Indicators for adequate milk intake:
  - a. baby urinates 6 or more times per day
  - b. baby has as many as 4-8 bowel movements per day
  - c. baby's growth curve is within normal limits
  - d. all of the above
- 10.Poor weight gain in an exclusively breastfed infant (less than 6 months) is most often caused by:
  - a. low fat content of milk
  - b. inappropriate feeding routine
  - c. poor maternal nutrition
  - d. infant's need for vitamin supplement